Version Control System (VCS), GIT
Spring AU 2021

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Git repo: https://github.com/ajaysr047/gitAssignment

1. Status after and before staging the "Dummy.java" file

```
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        Dummy.java

nothing added to commit but untracked files present (use "git add" to track)
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git add Dummy.java
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   Dummy.java

ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ 
```

2. Initial commit to the local repo

```
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git commit -m "Initial commit"
[master (root-commit) 9a465c5] Initial commit
 1 file changed, 7 insertions(+)
 create mode 100644 Dummy.java
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ 
```

3. Pushing to the remote repo's master branch

```
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git push origin master
Username for 'https://github.com': ajaysr047
Password for 'https://ajaysr047@github.com':
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 312 bytes | 312.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/ajaysr047/gitAssignment
 * [new branch]      master -> master
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ 
```

4. Git diff

```
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git diff
diff --git a/Dummy.java b/Dummy.java
index 4e1972f..3734761 100644
--- a/Dummy.java
+++ b/Dummy.java
@@ -3,5 +3,6 @@ public class Dummy
     public static void main(String args[])
     {
         System.out.println("Dummy Java Class!");
+        System.out.println("Print to highlight git diff");
     }
 }
\ No newline at end of file
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ 
```

5. Unstaging a staged file

```
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        toRemove.txt

nothing added to commit but untracked files present (use "git add" to track)
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git add toRemove.txt
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   toRemove.txt

ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git rm --cached toRemove.txt
rm 'toRemove.txt'
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git status
On branch master
Untracked files:
  (use "git add <file>..." to include in what will be committed)
        toRemove.txt

nothing added to commit but untracked files present (use "git add" to track)
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ 
```

6. Removing a committed file using git rm

```
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git add toRemove.txt
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git commit -m "adding toRemove.txt"
[master ea28404] adding toRemove.txt
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 toRemove.txt
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git status
On branch master
nothing to commit, working tree clean
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git rm toRemove.txt
rm 'toRemove.txt'
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        deleted:    toRemove.txt
```

7. Commit after rm and git log

```
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git commit -m "after rm"
[master 2104e71] after rm
 1 file changed, 0 insertions(+), 0 deletions(-)
 delete mode 100644 toRemove.txt
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git log
commit 2104e7188230692d8f8b796f4d2c84ed345e810e (HEAD -> master)
Author: ajay <ajaysr047@gmail.com>
Date:   Wed Jan 6 21:24:26 2021 +0530

    after rm

commit ea28404e14f914a1708ee8ea9246ae22af83b6d4
Author: ajay <ajaysr047@gmail.com>
Date:   Wed Jan 6 21:21:01 2021 +0530

    adding toRemove.txt

commit 8e620aeba64c982f39d10fd033038e17f092b669
Author: ajay <ajaysr047@gmail.com>
Date:   Wed Jan 6 21:14:58 2021 +0530

    second commit

commit 9a465c54697c80ef305d7f3210411aebc8b1f53e (origin/master)
Author: ajay <ajaysr047@gmail.com>
Date:   Wed Jan 6 20:58:37 2021 +0530

    Initial commit
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ 
```

8. Git mv (Rename committed file)

```
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git add dummyName.txt
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   dummyName.txt

ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git commit -m "add dummyName.txt"
[master 2640479] add dummyName.txt
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 dummyName.txt
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git status
On branch master
nothing to commit, working tree clean
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git mv dummyName.txt newName.txt
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git status
On branch master
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        renamed:    dummyName.txt -> newName.txt

ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git commit -m "renamed dummyName.txt"
[master 1e7313c] renamed dummyName.txt
 1 file changed, 0 insertions(+), 0 deletions(-)
 rename dummyName.txt => newName.txt (100%)
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git status
On branch master
nothing to commit, working tree clean
```

9. Git tag

Added two version tags, the commits can be reviewed with their respective tags

```
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git tag -a v1.0.0 -m "First Dummy version"
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git tag
v1.0.0
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git show v1.0.0
tag v1.0.0
Tagger: ajay <ajaysr047@gmail.com>
Date:   Wed Jan 6 21:38:25 2021 +0530

First Dummy version

commit 1e7313c5c3a0c81c5e38f7ac6cbb1f0d6ee68658 (HEAD -> master, tag: v1.0.0, origin/master)
Author: ajay <ajaysr047@gmail.com>
Date:   Wed Jan 6 21:31:47 2021 +0530

    renamed dummyName.txt

diff --git a/dummyName.txt b/newName.txt
similarity index 100%
rename from dummyName.txt
rename to newName.txt
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ touch fileForV2.txt
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git add fileForV2.txt
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git commit -m "version 2"
[master f8aee51] version 2
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 fileForV2.txt
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git tag -a v2.0.0 "Second dummy version"
fatal: Failed to resolve 'Second dummy version' as a valid ref.
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git tag -a v2.0.0 -m "Second dummy version"
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git tag
v1.0.0
v2.0.0
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$ git show v2.0.0
tag v2.0.0
Tagger: ajay <ajaysr047@gmail.com>
Date:   Wed Jan 6 21:39:57 2021 +0530

Second dummy version

commit f8aee51218ed20e3b8324c0a7c7d5cd1a8d2ae09 (HEAD -> master, tag: v2.0.0)
Author: ajay <ajaysr047@gmail.com>
Date:   Wed Jan 6 21:39:29 2021 +0530

    version 2

diff --git a/fileForV2.txt b/fileForV2.txt
new file mode 100644
index 0000000..e69de29
ajay@ajay-Predator-PH315-51:~/Documents/SpringAU/dayOne/gitAssignment$
```